REMARKS

Status of the Application

Claims 1-6, 9 and 13-21 are pending. Claims 1, 3, 4, 5, and 19 are amended herein. Claims 7 and 8 are canceled herein. Claim 21 is added herein. Claim 16 is allowed. Applicants acknowledge with appreciation the indication of allowance. Claims 1-9, 13-15, and 17-20 stand as rejected.

Claim 1 is amended to incorporate the subject matter of Claim 8, now canceled. No new matter is introduced.

Claims 3, 4, and 5 are amended to limit the conductive polymer to a polythiophene, a polypyrrole, and a polyaniline, respectively. No new matter is introduced.

Claim 19 is amended for the purposes of clarity. No new matter is introduced.

Claim 21 is added to recite an electronic device comprising the buffer layer of Claim 16. Support for this can be found throughout the specification, and particularly at page 2, lines 13-16, and page 15, lines 24-25. No new matter is introduced.

Rejection under 35 U.S.C. § 102/103

Claims 1-7, 13, 14, 17 and 18 stand as rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. 5,300,575 ("Jonas"). This rejection is respectfully traversed.

Jonas is related to dispersions of polythiophenes having a specific structure unit combined with a polyanion. The polyanions of Jonas is defined at column 2, lines 45-52, as anions of polymeric carboxylic acids, polymeric sulfonic acids, and polyvinylsulfonic acids. Copolymers can also be used. Thus, the polythiophene of Jonas has a *polymeric* dopant. This is distinctly different from and not suggestive of Applicants' invention in which a conductive polymer is doped with a non-polymeric acid. Nor is there any teaching or suggestion in Jonas of a colloid-forming polymeric acid which is a fluorinated polymeric sulfonic acid, as recited in amended Claim 1.

Furthermore, with respect to Claims 4 and 5, Jonas does not teach or suggest a composition with polypyrrole or polyaniline, respectively, as the amended claims now recite.

Applicants' compositions, buffer layers, and devices are not the same as or obvious from the teachings of Jonas.

Applicants respectfully submit that this rejection has been overcome and request that it be withdrawn.

Rejections under 35 U.S.C. § 103

(1) Jonas in view of Otagawa

Claims 8, 9, 15, 19 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 5,300,575 ("Jonas"), in view of U.S. 5,002,700 ("Otagawa"). This rejection is respectfully traversed.

Otagawa teaches the electropolymerization of aniline onto an electrode substrate in the presence of an organic dopant having at least one sulfonic acid group. Possible organic dopants are listed at column 3, line 67, to column 4, line 7, and include non-polymeric dopants, a polymeric dopant, and "modified NAFION® solution" . Applicants can find no explanation of what a modified NAFION® solution is. All other references to "NAFION" in Otagawa are to NAFION *films*. The "NAFION®-Polyaniline/Tosylate Composite Electrodes" of Otagawa are discussed from column 12, line 46, to column 15, line 14. They are made by (1) polymerizing polyaniline/tosylate on a NAFION® film coated electrode or (2) depositing a multilayer Nafion film on a polyaniline/tosylate electrode. (see column 14, lines 14-17) Otagawa does not teach the formation of an aqueous dispersion, as recited in Applicants' Claim 9, or a buffer layer made from such aqueous dispersion, as recited in Applicants' Claim 15.

The Examiner has stated that the disclosures of Jonas and Otagawa are "sufficiently similar both in terms of materials and purpose, such that their teachings are relevant to each other and can be combined." Applicants respectfully submit that the purposes and products of the two references are very different. Jonas relates to "new polythiophene dispersions, to their production and to the use of the salts for the antistatic treatment of plastic moldings." (see column 1, lines 7-9). Otagawa relates to the formation of a film of doped aniline by electropolymerization and the use of that film "in electrical transmission and storage, e.g. as an electrode in an advance electrical storage battery." (see column 1, lines 44-52) Applicants respectfully submit that an antistatic coating has very different requirements from a storage battery electrode. There is no teaching or suggestion in Otagawa that any of the materials or processes can be used to form a dispersion of conductive polymer. There is no teaching or

suggestion in Jonas that the dispersion can be used to form an electrode for a storage battery.

Furthermore, Applicants respectfully submit that even if the teaching of Otagawa were combined with the teaching of Jonas, the result is not the same as or suggestive of Applicants' invention, as defined by the currently amended claims. There is no teaching of an aqueous dispersion having a colloid-forming polymeric acid which is a polymeric fluorinated sulfonic acid and an electrically conductive polymer doped with at least one non-polymeric organic acid anion. One of ordinary skill in the art would not know what the "modified NAFION® solution" of Otagawa was. Furthermore, that material is not indicated as an additive for an aqueous dispersion of a conductive polymer. At best, that material is a film combined with a film of the conductive polymer.

In addition, there is no teaching in Jonas or Otagawa, taken separately or together, of a method in which a polyaniline doped with a non-polymeric acid is combined with a colloid-forming polymeric acid which is a polymeric fluorinated sulfonic acid, as now recited in Applicants' Claims 19 and 20.

Applicants respectfully submit that this rejection has been overcome and request that it be withdrawn.

(2) Otagawa in view of Jonas and Han.

Claims 1-9, 13-15, and 17-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 5,002,700 ("Otagawa"), in view of U.S. 5,300,575 ("Jonas") and U.S. 5,185,100 ("Han"). This rejection is respectfully traversed.

Han relates to electrically conductive polymers doped with one or more non-oxidizing protonic acids. Although Han teaches that more than one acid dopant can be used, it does not teach or suggest the addition of a colloid-forming polymeric acid to a doped conductive polymer. The teaching of multiple dopants does not overcome the deficiencies of Otagawa and Jonas, as discussed above. There is no suggestion in any one or combination of these references that teaches the specific selection of a conductive polymer doped with a non-polymeric acid and then combination with a colloid-forming polymeric acid which is a polymeric fluorinated sulfonic acid.

Applicants respectfully submit that this rejection has been overcome and request that it be withdrawn.

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With regard to newly added Claim 21, Applicants respectfully submit that it is allowable as being dependent upon an allowed claim.

Conclusion

In view of the foregoing remarks, Applicants submit that the above referenced application is in condition for allowance. In addition to previously allowed Claim 16, a Notice of Allowance for the remaining pending claims 1-6, 9, 13-15, and 17-21 is earnestly requested.

Should the Examiner have questions about the application or the contents of this paper, the Examiner is invited to call the undersigned at the telephone number listed below.

Respectfully submitted,

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